

EXHIBIT 4

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION**

_____)	
ORACLE, INC.)	
)	
Plaintiff,)	
)	
v.)	Case No. CV 10-03561 WHA
)	
GOOGLE INC.,)	
)	
Defendant.)	
_____)	

HIGHLY CONFIDENTIAL

EXPERT REPORT OF DR. GREGORY K. LEONARD

CORRECTED (MARCH 10, 2016)

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242. Furthermore, a Sun Java ME presentation stated that, “Java ME losing Business Relevance in mobile.”³⁷² Alan Brenner, former Vice President of Engineering for Java Card and Java ME, expanded on the reasons for “the decrease in relevance of Java ME”: “I – well, as I’ve tried to say several times, what was meant by that statement is the landscape was changing, more capable devices were emerging, and the industry was consolidating. And to renew the value of our product, we needed to respond to those changes by providing additional implementation depth, and this presentation captures some of the things you need to do to do that.”³⁷³

243. After the time that Sun prepared one of its forecasts of Java ME licensing revenues (i.e., the late 2007/early 2008 forecasts used by Mr. Malackowski), the trend was toward smartphones and away from feature phones. Worldwide smartphone shipments increased from 119.56 million units in 2007 to 146 million units in 2008 and 169.98 million units in 2009.³⁷⁴ This trend would have occurred even without Android. Indeed, Android’s shipments were only 0.5 million units in 2008 and 6.97 million units in 2009 worldwide.³⁷⁵

244. Given that Java ME was highly dependent on feature phones, the shift away from feature phones toward smartphones accounted for at least part of the decrease in Java ME licensing revenue, and Android smartphones represented only a part of this shift because Android had only a share of the worldwide smartphone market. In a world without Android, many of the Java ME sales on feature phones that Mr. Malackowski claims were lost to Android

³⁷² Brenner 12/15/2015 Dep., Exhibit 1390 (OAGOOGL0013561757-786 at 769).

³⁷³ Brenner 12/15/2015 Dep., pp. 158:8-18.

³⁷⁴ “Global Smartphone Sales Forecast by Operating System and Region,” Strategy Analytics, January 2011.

³⁷⁵ “Global Smartphone Sales Forecast by Operating System and Region,” Strategy Analytics, January 2011.

would have been lost to other smartphone platforms, such as the iPhone, instead.³⁷⁶ Since Apple does not use Java ME on the iPhone and Java ME is not well-suited for other smartphones, it is likely that Java ME revenue would have decreased even in the absence of Android.³⁷⁷

245. It is likely that Sun's Java ME licensing revenues forecast prepared in late 2007/early 2008, and used by Mr. Malackowski to calculate lost profits, understated the effect that the shift away from feature phones toward smartphones, and in particular the effect of the iPhone, would have on Sun's Java ME licensing revenues. Third-party forecasts for the iPhone prepared around the time of Sun's Java ME licensing forecasts used by Mr. Malackowski generally under-forecasted the demand for the iPhone. For example, actual sales of the iPhone exceeded analyst forecasts by 46% over the 2008-2009 period.³⁷⁸

246. As a result, Sun's forecasts of Java ME licensing revenues as of late 2007/early 2008 likely overstate the actual Java ME licensing revenues that Sun could have actually achieved, even without Android in the market, in light of the general under-forecasting of demand for smartphones (in general) and the iPhone (in particular). This means that Mr. Malackowski's calculation of lost profits based on Sun's forecasts of Java ME licensing revenues, which misrepresent what Sun could have actually achieved even without Android in the market, is unreliable and inappropriate for purposes of a lost profits calculation.

³⁷⁶ As discussed above, the iPhone competes closely with Android handsets.

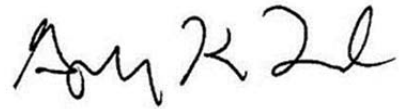
³⁷⁷ OAGOOGL0018885324 ("Developers are moving from Java to Apple and Android").

³⁷⁸ Actual iPhone unit volumes from "WW Quarterly Mobile Phone Tracker," IDC, November 13, 2015. Analyst forecasts from UBS Investment Research, Apple Inc., "Macs Humming into Macworld," December 17, 2007, p. 10; Morgan Stanley, Apple Inc., "Shifting Focus to New Products and Margins," p 7; Bear Stearns, Apple Inc., "Raising Estimates and CY08 Target to \$249 on Favorable Retail Survey and Asia Feedback," pp. 3-4. Data is adjusted for Apple's fiscal year ending September 30.

VIII. Awarding Lost Profits in Addition to Unjust Enrichment Would Double-Count Damages

283. I understand that a plaintiff asserting copyright infringement may seek recovery of both the unjust enrichment to the alleged infringer and any actual damages suffered by the copyright owner, such as lost profits, as long as the latter are not duplicative of the former.

284. Here, the claimed actual damages are Oracle's lost profits arising from claimed lost Java ME licensing revenues. The claimed lost Java ME licensing revenues, in turn, arise from claimed displacement of Java ME by Android. Thus, the claimed lost Java ME profits are the flip side of the Android profits that Oracle claims as unjust enrichment. Accordingly, it would be duplicative to award both the claimed actual damages consisting of Java ME lost profits and the claimed unjust enrichment.



Gregory K. Leonard
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